LAMPIRAN

Coding :

```
#include <Wire.h>
#include "SSD1306.h"
#define BLYNK_PRINT Serial


#include <ESP8266WiFi.h>
#include <BlynkSimpleEsp8266.h>
#include <Servo.h>
#define triggerPin D0
#define echoPin    D6

Servo servo;

// You should get Auth Token in the Blynk App.
// Go to the Project Settings (nut icon).
char auth[] = "9tw0cfhyn3Bq0CIpALsFYRQeY-8L-jhW";

// Your WiFi credentials.
// Set password to "" for open networks.
char ssid[] = "Device-11";
char pass[] = "thohir999";

WidgetLCD lcd(V5);
#include <DHT.h>

#define DHTPIN 4     // terhubung ke pin D2
#define DHTTYPE DHT11   // DHT 11

// Initialize the OLED display i2C
// D3 -> SDA
// D5 -> SCL

// Initialize the OLED display using Wire library
SSD1306  display(0x3C, D3, D5);
```

```
DHT dht(DHTPIN, DHTTYPE);
BlynkTimer timer;

void setup()
{
  // Debug console
  Serial.begin(9600);
  pinMode(triggerPin, OUTPUT);
  pinMode(echoPin, INPUT);

  display.init();

  display.flipScreenVertically();
  display.setFont(ArialMT_Plain_16);
  display.setTextAlignment(TEXT_ALIGN_LEFT);
  dht.begin(); // initialize dht

  Blynk.begin(auth, ssid, pass);
    servo.attach(2); // terhubung ke pin D4

  timer.setInterval(1000L, sendSensor);

  lcd.clear();
  lcd.print(0, 0, "Jarak cm");
}

void displayWeather(){
  float h = dht.readHumidity();
  // Read temperature as Celsius
  float t = dht.readTemperature();
  // Read temperature as Fahrenheit
  float f = dht.readTemperature(true);

  // Check if any reads failed and exit early (to try again).
  if (isnan(h) || isnan(t) || isnan(f)){
    display.clear(); // clearing the display
    display.drawString(5,0, "DHT Failed!");
    return;
```

```
  }
  display.clear();
  display.drawString(30, 0, "Weather");
  display.drawString(0, 20, "Humidity: " + String(h) + "%\t");
  display.drawString(0, 40, "Temp: " + String(t) + "°C");


}

void loop()
{
  lcd.clear();
  lcd.print(0, 0, "Jarak cm");
  long duration, jarak;
  digitalWrite(triggerPin, LOW);
  delayMicroseconds(3);

  digitalWrite(triggerPin, HIGH);
  delayMicroseconds(12);

  digitalWrite(triggerPin, LOW);
  duration = pulseIn(echoPin, HIGH);
  jarak = (duration / 2) / 29.1;
  Serial.print(jarak);
  Serial.println("Cm");
  lcd.print(7, 1, jarak);
  Blynk.run();
  delay(3500);
  displayWeather(); //Calling back the displayWeather function
  display.display();
  timer.run();
}
BLYNK_WRITE(V1)
{
   servo.write(param.asInt());
}

void sendSensor()
```

```
{
  float h = dht.readHumidity();  //membaca  humidity
  float t = dht.readTemperature(); // membaca Temperature

  if (isnan(h) || isnan(t)) {
    Serial.println("Failed to read from DHT sensor!");
    return;
  }
  Blynk.virtualWrite(V6, h);
  Blynk.virtualWrite(V7, t);
}
```